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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22907 7590 07/27/2009

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1100 13th STREET, N.W.  
SUITE 1200  
WASHINGTON, DC 20005-4051

EXAMINER

THAI, HANH B

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 07/27/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/510,045

10/01/2004

Teck Hock Png

000482.00007

8340

TITLE OF INVENTION: METADATA DATABASE MANAGEMENT SYSTEM AND METHOD THEREFOR

(1064.P004US)

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/27/2009

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

22907 7590 07/27/2009

**BANNER & WITCOFF, LTD.**  
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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,045	10/01/2004	Teck Hock Png	000482.00007 (1064.P004US)	8340

TITLE OF INVENTION: METADATA DATABASE MANAGEMENT SYSTEM AND METHOD THEREFOR

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	10/27/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
THAI, HANH B	2163	707-104100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,045	10/01/2004	Teck Hock Png	000482.00007 (1064 P004US)	8340
22907	7590	07/27/2009	EXAMINER	
THAI, HANH B				
BANNER & WITCOFF, LTD. 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			ART UNIT	PAPER NUMBER
			2163	
DATE MAILED: 07/27/2009				

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 709 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 709 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/510,045	PNG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	HANH B. THAI	2163	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 4/2/2009.
2. ☒ The allowed claim(s) is/are 1-20, 26-31, 37-42, 45 and 48-52 and renumbered as 1-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
|--|---|

/Hanh B Thai/  
Examiner, Art Unit 2163

/Wilson Lee/  
Primary Examiner, Art Unit 2163

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### DETAILED ACTION

1. This is in response to amendment filed on April 2, 2009. Claims 21, 23-25, 32-36, 43-44 and 46-47 have been cancelled. Claims 1-20, 22, 26-31, 37-42, 45, 48-52 are pending in this application.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Stephanie L. Knapp on July 17, 2009 and July 22, 2009.

3. Please amend claims 1-20, 26-31, 37-42, 45, 48-52 as below:

Claim 1. (Currently amended) A computer system configured to ~~be coupled to~~ manage a metadata database and at least one information database,

wherein the at least one information database is ~~coupled~~ configured to receive information from at least one information source and ~~coupled~~ configured to provide information to at least one information consumer, and

wherein the metadata database ~~for storing~~ stores metadata associated with data stored in the at least one information database, ~~for storing~~ stores metadata associated with the at least one information source, and ~~for storing~~ stores metadata associated with the at least one information consumer, and

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wherein the computer system ~~having~~ includes a knowledge manager ~~configured to be coupled to~~ in communication with the metadata database and ~~comprising~~ comprises a plurality of metadata applications for managing a plurality of knowledge aspects of the at least one information database, for accessing at least some of the metadata stored in the metadata database, and for using the at least some of the metadata to manage at least one of a plurality of knowledge aspects of the at least one information database, the plurality of metadata applications comprising:

a data model manager ~~for~~ using the at least some of the metadata to manage at least one data model of the at least one information database and presenting the at least one data model in graphical form;

a data dictionary manager ~~for~~ using the at least some of the metadata to generate and manage at least one data dictionary of the at least one information database, wherein the data dictionary manager accesses metadata stored in a knowledge entity and a data dictionary portion of the metadata database;

a knowledge entity manager ~~for~~ using the at least some of the metadata to manage at least one knowledge entity of the at least one information database and using the at least some of the metadata to structure a relationship of the at least one knowledge entity;

a data mapper ~~for~~ using the at least some of the metadata to manage at least one data mapping of the at least one information database based on one of an information source, an information source provider, and an information consumer; and

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a change manager ~~for~~ using the at least some of the metadata to manage at least one change associated with the at least one information database, wherein the change manager accesses metadata stored in a change management portion of the metadata database,

wherein one or more of the data model manager, the data dictionary manager, the knowledge entity manager, the data mapper, and the change manager are stored on an application server.

Claim 2. (Currently amended) A The computer system in accordance with claim 1 being ~~adapted for~~ dynamically ~~coupling~~ coupled to the at least one information database.

Claim 3. (Currently amended) A The computer system in accordance with claim 1 being ~~adapted for~~ dynamically ~~coupling~~ coupled to the plurality of information sources.

Claim 4. (Currently amended) A The computer system in accordance with claim 1 being ~~adapted for~~ dynamically ~~coupling~~ coupled to the plurality of information consumers.

Claim 5. (Currently amended) A The computer system in accordance with claim 1, wherein the at least one information source comprises at least another information database, the computer system is configured ~~for coupling~~ to couple to the at least another information database, and the metadata database is for storing metadata associated with the at least another information database.

Claim 6. (Currently amended) A The computer system in accordance with claim 5, wherein the at least another information database has at least another one information source coupled thereto, the computer system is configured ~~for coupling to couple~~ to the at least another one information source, and the metadata database is for storing metadata associated with the at least another one information source.

Claim 7. (Currently amended) A The computer system in accordance with claim 5, wherein the at least another information database has at least another one information consumer coupled thereto, the computer system is configured ~~for coupling to couple~~ to the at least another one information consumer, and the metadata database ~~is for storing~~ stores metadata associated with the at least another one information consumer.

Claim 8. (Currently amended) A The computer system in accordance with claim 1, wherein the at least one information consumer comprises at least one other information database, the computer system is configured ~~for coupling to couple~~ to the at least one other information database, and the metadata database ~~is for storing~~ stores metadata associated with the at least one other information database.

Claim 9. (Currently amended) A The computer system in accordance with claim 8, wherein the at least one other information database is coupled to at least one other information source, the computer system is configured ~~for coupling to couple~~ to the at least



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one other information source, and the metadata database ~~is for storing~~ stores metadata associated with the at least one other information source.

Claim 10. (Currently amended) ~~A~~ The computer system in accordance with claim 8, wherein the at least one other information database is coupled to at least one other information consumer, the computer system is configured ~~for coupling~~ to couple to the at least one other information consumer, and the metadata database is for storing metadata associated with the at least one other information consumer.

Claim 11. (Previously Presented) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a knowledge portion of the metadata database, and wherein the at least some of the metadata comprises at least one knowledge metadata.

Claim 12. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a knowledge entity portion of the metadata database, and wherein the at least some of the metadata comprises at least one knowledge entity metadata.

Claim 13. (Currently Amended) The ~~A~~ computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a data

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mapping portion of the metadata database, and wherein the at least some of the metadata comprises at least one data mapping metadata.

Claim 14. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a data dictionary portion of the metadata database, and wherein the at least some of the metadata comprises at least one data dictionary metadata.

Claim 15. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a change management portion of the metadata database, and wherein the at least some of the metadata comprises at least one change management metadata.

Claim 16. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a business rules portion of the metadata database, and wherein the at least some of the metadata comprises at least one business rules metadata.

Claim 17. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a business event portion of the metadata database, and wherein the at least some of the metadata comprises at least one business event metadata.

Claim 18. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a reference and standards portion of the metadata database, and wherein the at least some of the metadata comprises at least one reference and standards metadata.

Claim 19. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a multiple language portion of the metadata database, and wherein the at least some of the metadata comprises at least one multiple language metadata.

Claim 20. (Currently Amended) ~~A~~ The computer system in accordance with claim 1, wherein the at least some of the metadata stored in the metadata database constitute a document resources portion of the metadata database, and wherein the at least some of the metadata comprises at least one document resources metadata.

Claim 22. (Cancelled)

Claim 26. (Currently amended) ~~A~~ The computer system in accordance with claim 1, wherein the metadata applications further comprise a business rules processor ~~for~~ using the at least some of the metadata to manage at least one business rule associated with the at least one information database.

Claim 27. (Currently amended) A The computer system in accordance with claim 1, wherein the metadata applications further comprise a reference and standards processor ~~for~~ using the at least some of the metadata to manage at least one reference of the at least one information database.

Claim 28. (Currently Amended) A The computer system in accordance with claim 27, wherein the at least one reference comprises at least one standard.

Claim 29. (Currently amended) A The computer system in accordance with claim 1, wherein the metadata applications further comprise a performance manager ~~for~~ using the at least some of the metadata to manage at least one performance aspect of the at least one information database.

Claim 30. (Currently amended) A The computer system in accordance with claim 1, wherein the metadata applications further comprise a graphical user interface ~~for~~ using the at least some of the metadata to manage at least one graphical user interface aspect of the at least one information database.

Claim 31. (Currently amended) A computer system configured to ~~be coupled~~ manage a metadata database, the metadata database ~~coupled to~~ in communication with at least one information database and configured to receive information from at least one

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information source and to provide information to at least one information consumer, the metadata database comprising:

a metadata repository stored in an application server for storing metadata associated with data stored in the at least one information database, for storing metadata associated with the at least one information source, and for storing metadata associated with the at least one information consumer, the metadata repository comprising:

a knowledge portion providing information relating to knowledge entities and at least some of the metadata comprises at least one knowledge metadata;

a knowledge entity portion providing information on an organization of the knowledge entities and at least some of the metadata comprises at least one knowledge entity metadata;

a data mapping portion providing information on a multi-dimensional mapping between information received and stored and at least some of the metadata comprises at least one data mapping metadata;

a data dictionary portion providing information that describes what type of information is stored and at least some of the metadata comprises at least one data dictionary metadata; and

a change management portion providing information on changes within the metadata repository and wherein at least some of the metadata comprises at least one change management metadata.

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Claim 37. (Currently Amended) A The metadata database in accordance with claim 31 further comprising a business rules portion of the metadata repository, and at least some of the metadata comprises at least one business rules metadata.

Claim 38. (Currently Amended) A The metadata database in accordance with claim 31 further comprising a business event portion the metadata repository, and at least some of the metadata comprises at least one business event metadata.

Claim 39. (Currently Amended) A The metadata database in accordance with claim 31 further comprising a reference and standards portion of the metadata repository, and at least some of the metadata comprises at least one reference and standards metadata.

Claim 40. (Currently Amended) A The metadata database in accordance with claim 31 further comprising a multiple language portion of the metadata repository, and at least some of the metadata comprises at least one multiple language metadata.

Claim 41. (Currently Amended) A The metadata database in accordance with claim 31 further comprising a document resources portion of the metadata repository, and at least some of the metadata comprises at least one document resources metadata.

Claim 42. (Currently amended) A computer system including a knowledge manager for a metadata database management system of at least one information database, wherein the

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at least one information database is ~~coupled~~ configured to receive information from at least one information source and ~~coupled~~ configured to provide information to at least one information consumer, and

wherein the knowledge manager ~~having~~ includes a plurality of metadata applications ~~for coupling to~~ in communication with a metadata database, for managing a plurality of knowledge aspects of the at least one information database, for accessing at least some of the metadata stored in the metadata database, and for using the at least some of the metadata to manage at least one of the plurality of knowledge aspects of the at least one information database, the plurality of metadata applications comprising:

a data model manager ~~for~~ using the at least some of the metadata to manage at least one data model of the at least one information database and presenting the at least one data model in graphical form;

a dictionary manager ~~for~~ using the at least some of the metadata to generate and manage at least one data dictionary of the at least one information database, wherein the data dictionary manager accesses metadata stored in a knowledge entity and a data dictionary portion of the metadata database;

a data mapper ~~for~~ using the at least some of the metadata to manage at least one data mapping of the at least one information database based on one of an information source, and information source provider, and an information consumer;

a change manager ~~for~~ using the at least some of the metadata to manage at least one change associated with the at least one information database, wherein the change manager accesses metadata stored in a change management portion of the metadata database.

wherein at least one of the data model manager, the dictionary manager, the data mapper, and the change mapper are stored on an application server.

Claim 45. (Currently Amended) A The knowledge manager in accordance with claim 42, the plurality of metadata applications further comprising a knowledge entity manager ~~for~~ using the at least some of the metadata to manage at least one knowledge entity of the at least one information database.

Claim 48. (Currently Amended) A The knowledge ~~manner~~ manager in accordance with claim 42, the plurality of metadata applications further comprising a business rules processor for using the at least some of the metadata to manage at least one business rule associate with the at least one information database.

Claim 49. (Currently Amended) A The knowledge manager in accordance with claim 42, the plurality of metadata applications further comprising a reference and standards processor ~~for~~ using the at least some of the metadata to manage at least one reference of the at least one information database.

Claim 50. (Currently Amended) A The knowledge manager in accordance with claim 49, wherein the at least one reference comprises at least one standard.

Claim 51. (Currently Amended) A The knowledge manager in accordance with claim 42, the plurality of metadata applications further comprising a performance manager



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~~for~~ using the at least some of the metadata to manage at least one performance aspect of the at least one information database.

Claim 52. (Currently Amended) ~~A~~ The knowledge manager in accordance with claim 42, the plurality of metadata applications further comprising at least one graphical user interface ~~for~~ using the at least some of the metadata to manage at least one graphical user interface aspect of the at least one information database.

***Allowable Subject Matter***

4. Claims 1-20, 26-31, 37-42, 45 and 48-52 are allowed over the prior art of record.

5. The following is an examiner's statement of reasons for allowance:

Regarding independent claims 1, 31 and 42, the prior art fails to disclose or suggest the claimed provision "the plurality of metadata applications comprising a data model, a data dictionary, a knowledge entity, a data mapper or mapping and a change manager or management" as claimed in conjunction with remaining claims provisions.

6. The dependent claims, being further limiting to the independent claims, definite and enabled by the Specification are also allowed.

***Comments***

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Other Prior Art Made of Record***

8. 1. Helgeson et al. (US 2002/0073236 A1) disclose method and apparatus for managing data exchange among systems in a network.
2. Mui et al. (US 2003/0229529 A1) disclose method for enterprise workforce planning.
3. Mehra et al. (US 2002/0049603 A1) disclose method and apparatus for a business applications server.
4. Lipkin et al. (US 2005/0154699 A1) disclose method and apparatus for an improved security system mechanism in a business applications management system platform.
5. Omigui (US 2008/0162498 A1) discloses system and method for knowledge retrieval, management, delivery and presentation.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

***Point of Contact***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HANH B. THAI whose telephone number is (571)272-4029. The examiner can normally be reached on Mon-Thur (7:00AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Wilson Lee/  
Primary Examiner, Art Unit 2163

Hanh B Thai  
Examiner  
Art Unit 2163

July 22, 2009